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(Original Signature of Member)

112TH CONGRESS
1ST SESSION

H. R. _____

To ensure that nuclear power plants can withstand and adequately respond to earthquakes, tsunamis, strong storms, or other events that threaten a major impact.

IN THE HOUSE OF REPRESENTATIVES

Mr. MARKEY introduced the following bill; which was referred to the Committee on _____

A BILL

To ensure that nuclear power plants can withstand and adequately respond to earthquakes, tsunamis, strong storms, or other events that threaten a major impact.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the ''Nuclear Power Plant Safety Act of 2011''.

SEC. 2. NUCLEAR POWER PLANT SAFETY.

(a) AMENDMENT.—Chapter 14 of the Atomic Energy Act of 1954 (42 U.S.C. 2201 et seq.) is amended by adding at the end the following new section:

''SEC. 170J. REVISION OF NUCLEAR POWER PLANT SAFETY REGULATIONS.—

''a. Not later than 90 days after the date of enactment of the Nuclear Power Plant Safety Act of 2011, the Commission shall initiate a rulemaking proceeding, including notice and opportunity for public comment, to be completed not later than 18 months after such date of enactment, to revise its regulations to ensure that each utilization facility licensed under this Act can withstand and adequately respond to—

''(1) an earthquake, tsunami (for a facility located in a coastal area), strong storm, or other event that threatens a major impact to the facility;

''(2) a loss of the primary operating power source for at least 14 days; and

''(3) a loss of the primary backup operating power source for at least 72 hours.

''b. The revision of regulations under this section shall provide for—

''(1) a requirement that each licensed utilization facility, including any onsite spent nuclear fuel facilities, be equipped with resilient containment,

safety, and diagnostic systems sufficient to withstand the circumstances described in subsection a., including requirements to ensure that the reactor core remains cooled, that the containment remains intact, and that the spent fuel cooling and spent fuel pool integrity are maintained;

''(2) a requirement that licensees have at least 14 days worth of emergency power system fuel onsite with which to power the licensed facility in the event of a loss of the primary operating power source;

''(3) a requirement that licensees have sufficient secondary emergency power to power the licensed facility in the event of a loss of both the primary operating power source and the emergency power system described in paragraph (2) for at least 72 hours;

''(4) a requirement that licensees develop, and obtain approval from the Commission for, a plan to obtain sufficient additional fuel or batteries in the event of a long duration loss of operating power or total station blackout;

''(5) a requirement that licensees amend, and obtain approval from the Commission for, any guidance and strategies developed by the licensees that

are intended to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities under the circumstances associated with loss of large areas of the plant due to explosions or fire, in order to incorporate lessons learned from the Fukushima nuclear power plant meltdown into such guidance and strategies;

''(6) a requirement that spent nuclear fuel rods be moved from storage pools to certified dry cask storage within one year of the nuclear fuel rods being qualified to be placed in the certified dry casks;

''(7) a requirement to configure spent nuclear fuel rods in spent nuclear fuel pools in a manner that would minimize the chance of a fire in the event of the loss of the water in the spent nuclear fuel pool;

''(8) a requirement that emergency response exercises include scenarios that are based on the near-simultaneous occurrence of circumstances described in subsection a. such as the near-simultaneous earthquake, tsunami, and total station blackout that occurred at the Fukushima nuclear power plant in 2011; and

''(9) appropriate requirements for periodic verification of compliance with the regulations issued under this section.

''c. The Commission shall not issue an approval for any construction permit, operating license, license extension, design certification, combined license, design approval, or manufacturing license until the revisions of regulations under this section take effect.''.

(b) CONFORMING AMENDMENT.—The table of contents of the Atomic Energy Act of 1954 is amended by inserting after the item relating to section 170I the following new item:

''Sec. 170J. Revision of nuclear power plant safety regulations.''.

SEC. 3. LOAN GUARANTEES.

Section 1702(b) of the Energy Policy Act of 2005 (42 U.S.C. 16512(b)) is amended by inserting after paragraph (2) the following:

''In the case of a guarantee for advanced nuclear energy facilities, the Secretary shall ensure that the cost of the obligation is calculated using a consideration of the Tohoku earthquake of 2011 to estimate the risk characteristics of the project.''.